SAC3809Q4

GaAs MMIC 2-Way Power Divider
1~18GHz

Rev 1.0

Features

- Frequency：1～18GHz
- Insertion Loss：1.8dB typ.
- Input/Output VSWR：1.4:1 TYP.
- Package Size：4mm x4mm x1.3mm

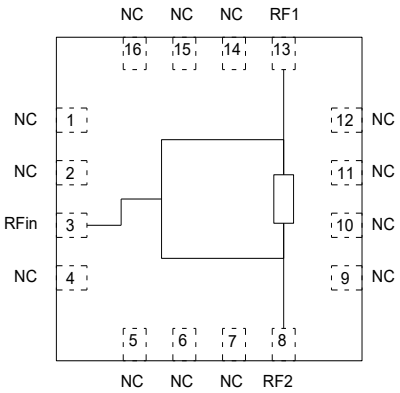
Typical Applications

- Microwave radio including point to point communication
- Telecommunication
- Weather radar
- Optical communication
- Test instrumentation
- SatCom
- VSAT
- Aerospace

General Description

SAC3809Q4 is a GaAs MMIC 2-Way 0° power divider which operates between 1~18GHz with insertion loss 1 dB and VSWR 1.4:1.

Functional Diagram



Electrical Performance (T_A=25℃, Z_0=50Ω)

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	Zin=Zout=50Ω T_A=+25℃	1	—	18	GHz
Insertion Loss	IL		—	-1	-1.8	dB
Amplitude Unbalance	AU		—	±0.1	—	dB
Phase Unbalance	PU		—	±1.5	—	°
RFC VSWR	VSWR		—	1.4	1.9	:1
RF1,RF2 VSWR			—	1.4	1.6	:1
Isolation	ISO		—	20	—	dB

Absolute Maximum Ratings

Maximum Input Power	+27dBm	Operating Temperature	-55℃～+85℃
		Storage Temperature	-65℃～+150℃

RoHS

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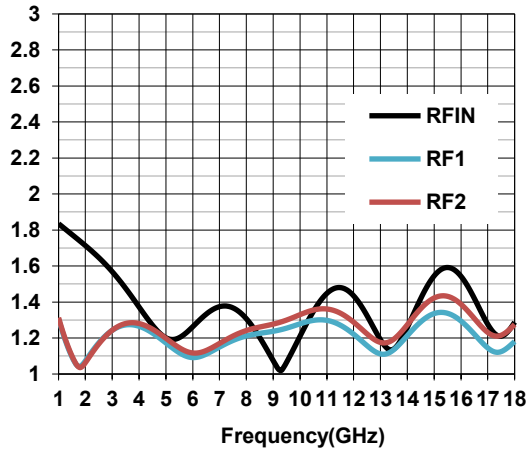
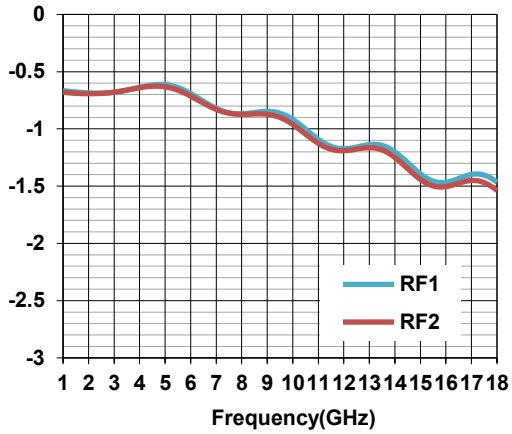
Typical Performance Curve

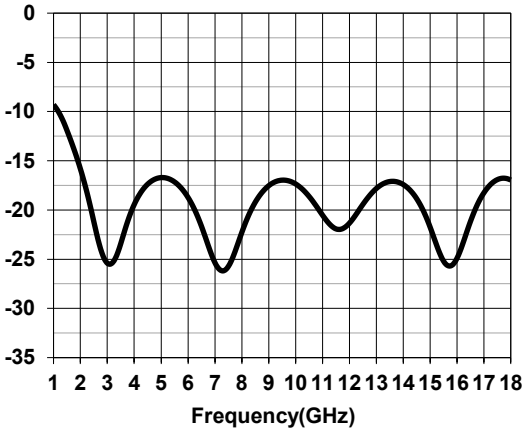
VSWR vs. Frequency



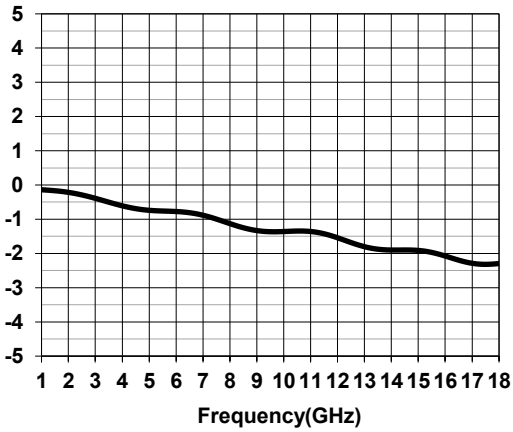
Insertion Loss(dB) vs. Frequency



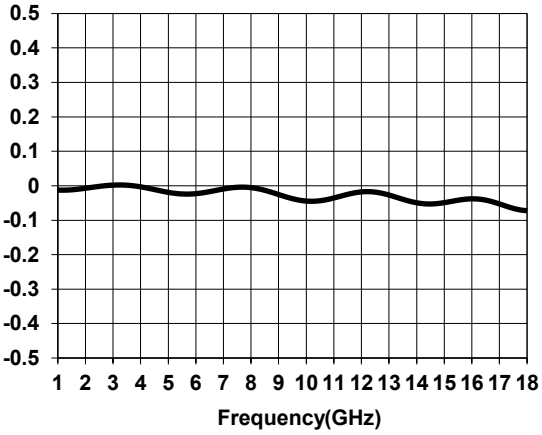
Isolations (dB)vs. Frequency



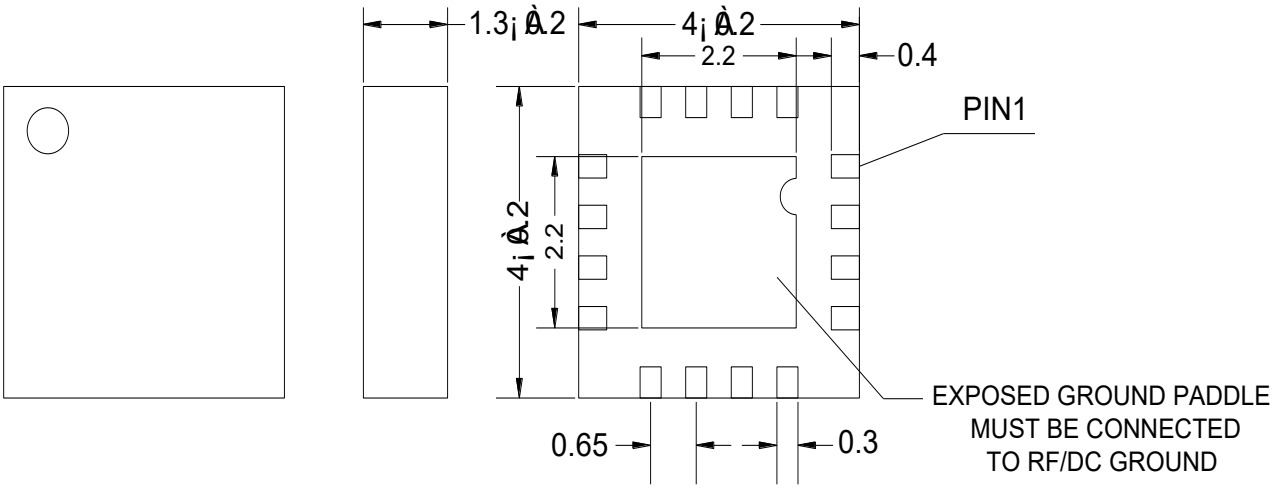
Phase Unbalance(°) vs. Frequency



Amplitude Unbalance(dB) vs. Frequency



Outline
(All dimensions in mm)



Attention:

1. The moisture resistant grade of products is 2A, the storage environment ≤30° C/60% RH，The surrounding workshop Life is 4 weeks.

2. After un-packing, It is necessary to bake the parts for 6 hours in 125+/-5 degree environment before soldering.

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